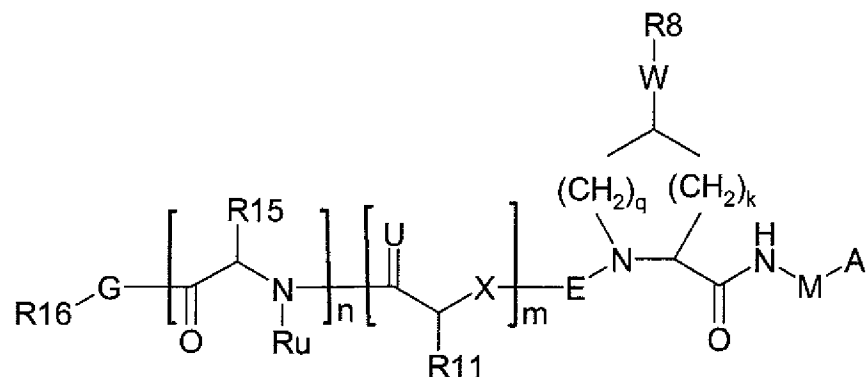


IN THE CLAIMS:

The following listing replaces all prior versions and listings of the claims. Any claim that is cancelled or subject matter deleted is effected without prejudice.

1. (Currently Amended) A compound of the formula I:



wherein

A is $C(=O)R^1$, $C(=O)NHSO_2R^2$, $C(=O)NHR^3$, or $CR^4R^{4'}$ wherein;

R^1 is hydrogen, C_1 - C_6 alkyl, C_0 - C_3 alkylcarbocyclyl, C_0 - C_3 alkylheterocyclyl;

R^2 is C_1 - C_6 alkyl, C_0 - C_3 alkylcarbocyclyl, C_0 - C_3 alkylheterocyclyl;

R^3 is C_1 - C_6 alkyl, C_0 - C_3 alkylcarbocyclyl, C_0 - C_3 alkylheterocyclyl, $-OC_1$ - C_6 alkyl, $-OC_0$ - C_3 alkylcarbocyclyl, $-OC_0$ - C_3 alkylheterocyclyl;

R^4 is $=O$, halo, amino, or OH ; or R^4 and $R^{4'}$ together are $=O$;

$R^{4'}$ is C_1 - C_6 alkyl, C_0 - C_3 alkylcarbocyclyl, C_0 - C_3 alkylheterocyclyl; wherein

R^2 , R^3 , and $R^{4'}$ are each optionally substituted with 1 to 3 substituents

independently selected from the group consisting of halo, oxo, nitrile, azido, nitro,

C_1 - C_6 alkyl, C_0 - C_3 alkylcarbocyclyl, C_0 - C_3 alkylheterocyclyl, NH_2CO -, $Y-NRaRb$,

$Y-O-Rb$, $Y-C(=O)Rb$, $Y-(C=O)NRaRb$, $Y-NRaC(=O)Rb$, $Y-NHSO_pRb$, Y -

$S(=O)_pRb$ and $Y-S(=O)_pNRaRb$, $Y-C(=O)ORb$, $Y-NRaC(=O)ORb$;

Y is independently a bond or C_1 - C_3 alkylene;

Ra is independently H or C_1 - C_3 alkyl;

Rb is independently H, C_1 - C_6 alkyl, C_0 - C_3 alkylcarbocyclyl or C_0 - C_3 alkylheterocyclyl;

p is independently 1 or 2;

M is CR^7R^7 or NRu ;

R^7 is C_1 - C_6 alkyl, C_0 - C_3 alkyl C_3 - C_7 cycloalkyl, or C_2 - C_6 alkenyl, any of which is optionally substituted with 1-3 halo atoms, or an amino, -SH, or C_0 - C_3 alkylcycloalkyl group; or R^7 is J;

R^7 is H or taken together with R^7 forms a C_3 - C_6 cycloalkyl ring optionally substituted with R^{7a} wherein;

R^{7a} is C_1 - C_6 alkyl, C_3 - C_5 cycloalkyl, C_2 - C_6 alkenyl any of which may be optionally substituted with halo; or R^{7a} can be J;

q is 0 to 3 and k is 0 to 3; where $q+k \geq 1$;

W is $-CH_2-$, $-O-$, $-OC(=O)H-$, $-OC(=O)-$, $-S-$, $-NH-$, $-NRa$, $-NHSO_2-$, $-NHC(=O)NH-$ or $-NHC(=O)-$, $-NHC(=S)NH-$ or a bond;

R^8 is a ring system containing 1 or 2 saturated, partially saturated or unsaturated rings each of which has 4-7 ring atoms and each of which has 0 to 4 hetero atoms independently selected from S, O and N, the ring system being optionally spaced from W by a C_1 - C_3 alkylene group; or R^8 is C_1 - C_6 alkyl; any of which R^8 groups can be optionally mono-, di-, or tri-substituted with R^9 , wherein

R^9 is independently selected from the group consisting of halo, oxo, nitrile, azido, nitro,

C_1 - C_6 alkyl, C_0 - C_3 alkylcarbocyclyl, C_0 - C_3 alkylheterocyclyl, $NH_2C(=O)-$, $Y-NRaRb$, $Y-O-$

Rb, Y-C(=O)Rb, Y-(C=O)NRaRb, Y-NRaC(=O)Rb, Y-NHSO_pRb, Y-S(=O)_pRb, Y-S(=O)_pNRaRb, Y-C(=O)ORb, Y-NRaC(=O)ORb; wherein said carbocyclyl or heterocyclyl is optionally substituted with R¹⁰; wherein

R¹⁰ is C₁-C₆alkyl, C₃-C₇cycloalkyl, C₁-C₆alkoxy, amino, amido, sulfonyl, (C₁-C₃alkyl)sulfonyl, NO₂, OH, SH, halo, haloalkyl, carboxyl;

E is -C(=O)-, -C(=S)-, -S(=O)₂-, -S(=O)-, -C(=N-Rf)-;

Rf is H, -CN, -C(=O)NRaRb; -C(=O)C₁-C₃alkyl;

X is -NR_x- where R_x is H, C₁-C₅alkyl or J; or in the case where E is -C(=O), X can also be -O- or -NR_jNR_j-;

wherein one of R_j is H and the other is H, C₁-C₅ alkyl or J;

R¹¹ is H, C₁-C₆alkyl, C₀-C₃alkylcarbocyclyl, C₀-C₃alkylheterocyclyl, any of which can be substituted with halo, oxo, nitrile, azido, nitro, C₁-C₆alkyl, C₀-C₃alkylcarbocyclyl, C₀-C₃alkylheterocyclyl, NH₂C(=O)-, Y-NRaRb, Y-O-Rb, Y-C(=O)Rb, Y-(C=O)NRaRb, Y-NRaC(=O)Rb, Y-NHSO_pRb, Y-S(=O)_pRb, Y-S(=O)_pNRaRb, Y-C(=O)ORb, Y-NRaC(=O)ORb; or R¹¹ is J;

J, if present, is a single 3 to 10-membered saturated or partially unsaturated alkylene chain extending from the R⁷/R^{7'} cycloalkyl or from the carbon atom to which R⁷ is attached to one of R_j, R_x, R_y or R¹¹ to form a macrocycle, which chain is optionally interrupted by one to three heteroatoms independently selected from: -O-, -S- or -NR¹²-, and wherein 0 to 3 carbon atoms in the chain are optionally substituted with R¹⁴; wherein;

R¹² is H, C₁-C₆alkyl, C₃-C₆cycloalkyl, or C(=O)R¹³;

R¹³ is C₁-C₆alkyl, C₀-C₃alkylcarbocyclyl, C₀-C₃alkylheterocyclyl;

R^{14} is independently selected from the group consisting of H, C_1 - C_6 alkyl, C_1 - C_6 haloalkyl, C_1 - C_6 alkoxy, hydroxy, halo, amino, oxo, thio and C_1 - C_6 thioalkyl;

R_u is independently H or C_1 - C_3 alkyl;

m is 0 or 1; n is 0 or 1;

U is =O or is absent;

R^{15} is H, C_1 - C_6 alkyl, C_0 - C_3 alkylcarbocyclyl, C_0 - C_3 alkylheterocyclyl, any of which can be substituted with halo, oxo, nitrile, azido, nitro, C_1 - C_6 alkyl, C_0 - C_3 alkylheterocyclyl, C_0 - C_3 alkylcarbocyclyl, NH_2CO -, $Y-NR_aR_b$, $Y-O-R_b$, $Y-C(=O)R_b$, $Y-(C=O)NR_aR_b$, $Y-NR_aC(=O)R_b$, $Y-NHSO_pR_b$, $Y-S(=O)_pR_b$, $Y-S(=O)_pNR_aR_b$, $Y-C(=O)OR_b$, $Y-NR_aC(=O)OR_b$;

G is $-O$ -, $-NR_y$ -, $-NR_jNR_j$:- where one R_j is H and the other R_j is H, C_1 - C_5 alkyl or J;

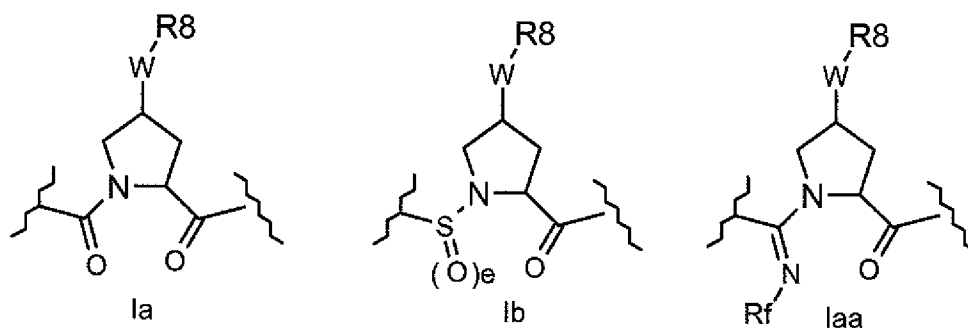
R_y is H, C_1 - C_3 alkyl; or R_y is J;

R^{16} is H; or C_1 - C_6 alkyl, C_0 - C_3 alkylcarbocyclyl, C_0 - C_3 alkylheterocyclyl, any of which can be substituted with halo, oxo, nitrile, azido, nitro, C_1 - C_6 alkyl, C_0 - C_3 alkylcarbocyclyl, C_0 - C_3 alkylheterocyclyl, NH_2CO -, $Y-NR_aR_b$, $Y-O-R_b$, $Y-C(=O)R_b$, $Y-(C=O)NR_aR_b$, $Y-NR_aC(=O)R_b$, $Y-NHSO_pR_b$, $Y-S(=O)_pR_b$, $Y-S(=O)_pNR_aR_b$, $Y-C(=O)OR_b$, $Y-NR_aC(=O)OR_b$;

with the proviso that when $m=n=0$ and G is O then R^{16} is not tert.butyl or phenyl;

or a pharmaceutically acceptable salt or prodrug thereof.

2. (Original) A compound according to Claim 1, wherein M is CR^7R^7 .
3. (Original) A compound according to claim 1, with the partial structure Ia, Ib or Iaa:



where e is 1 or 2.

4. (Original) A compound to Claim 1, wherein E is $-\text{C}(=\text{O})-$.
5. (Original) A compound according to Claim 1, wherein m is 0 and n is 0.
6. (Original) A compound according to Claim 5, wherein G is $-\text{NR}_y-$ or $-\text{NR}_j\text{NR}_j-$.
7. (Original) A compound according to Claim 6, where R_y or one of the R_j groups is J, thereby defining a macrocyclic compound.
8. (Original) A compound according to Claim 7, wherein R^{16} is H, C_1 - C_3 alkyl or C_3 - C_6 cycloalkyl.
9. (Original) A compound according to Claim 1, wherein m is 1.
10. (Original) A compound according to Claim 9, wherein X is $-\text{NR}_x-$.

11. (Original) A compound according to Claim 9, wherein U is O.
12. (Currently Amended) A compound according to Claim 9, wherein R¹¹ is C₁-C₆alkyl, C₀-C₃alkylcarbocyclyl, C₀-C₃alkylaryl or C₀-C₃alkylheteroaryl, any of which is optionally substituted with halo, amino, C₁-C₆alkoxy, C₁-C₆thioalkyl, carboxyl, (C₁-C₆alkoxy)carbonyl, aryl, heteroaryl, or heterocyclyl, ~~and especially wherein the substituent is or~~ hydroxy or C(=O)OR¹⁴.
13. (Currently Amended) A compound according to Claim 12, wherein R¹¹ is phenylethyl, 2,2-dimethyl-propyl, cyclohexylmethyl, phenylmethyl, 2-pyridylmethyl, 4-hydroxy-phenylmethyl, or carboxylpropyl; ~~or especially~~ tert-butyl, iso-butyl, or cyclohexyl.
14. (Original) A compound according to Claim 9, wherein one of Rx or R¹¹ is J, thereby defining a macrocyclic compound.
15. (Original) A compound according to Claim 9, wherein n is 1.
16. (Original) A compound according to Claim 15, wherein R¹⁵ is C₁-C₆alkyl or C₀-C₃alkylcarbocyclyl, either of which is optionally substituted.
17. (Original) A compound according to Claim 16, wherein R¹⁵ is cyclohexyl, cyclohexylmethyl, tert-butyl, iso-propyl, or iso-butyl.
18. (Original) A compound according to Claim 9, wherein G is NR_y or -NR_jNR_j-,

where R_y or one R_j is H or methyl, and the other R_j is H.

19. (Currently Amended) A compound according to Claim 18, wherein R¹⁶ is H, C₁-C₆alkyl, or a 5 or 6 membered heterocycle, ~~especially morpholine, piperidine or piperazine.~~

20. (Original) A compound according to claim 9, wherein R¹⁶ is C₁-C₆alkyl, C₀-C₃alkylheterocyclyl, C₀-C₃alkylcarbocyclyl, any of which is optionally substituted with hydroxy, halo, amino, or C₁-C₆alkoxy.

21. (Original) A compound according to Claim 20, wherein R¹⁶ is 2-indanol, indanyl, 2-hydroxy-1-phenyl-ethyl, 2-thiophenemethyl, cyclohexylmethyl, 2,3-methylenedioxybenzyl, cyclohexyl, benzyl, 2-pyridylmethyl, cyclobutyl, iso-butyl, n-propyl, or 4-methoxyphenylethyl.

22. (Currently Amended) A compound according to Claim 1, wherein W is -OC(=O)-, -NR_a-, -NHS(O)₂-or -NHC(=O)-; or ~~especially -OC(=O)NH- or -NH.~~

23. (Currently Amended) A compound according to Claim 1, wherein W is -S-, a bond or ~~especially -O-~~.

24. (Original) A compound according to Claim 22 or 23 wherein R⁸ is optionally substituted C₀-C₃alkylcarbocyclyl or optionally substituted C₀-C₃-alkylheterocyclyl.

25. (Original) A compound according to Claim 24, wherein the C₀-C₃ alkyl moiety is methylene or preferably a bond.

26 (Original) A compound according to Claim 25 wherein R⁸ is C₀-C₃alkylaryl, or C₀-C₃alkylheteroaryl, either of which is optionally mono, di, or tri substituted with R⁹, wherein; R⁹ is C₁-C₆ alkyl, C₁-C₆alkoxy, NO₂, OH, halo, trifluoromethyl, amino amido optionally mono- or di-substituted with C₁-C₆alkyl, C₀-C₃alkylaryl, C₀-C₃alkylheteroaryl, carboxyl, aryl or heteroaryl being optionally substituted with R¹⁰; wherein R¹⁰ is C₁-C₆alkyl, C₃-C₇cycloalkyl, C₁-C₆alkoxy, amino optionally mono- or di-substituted with C₁-C₆alkyl, amido, sulfonylC₁-C₃alkyl, NO₂, OH, halo, trifluoromethyl, carboxyl, or heteroaryl.

27 (Original) A compound according to Claim 26 wherein R⁹ is C₁-C₆ alkyl, C₁-C₆alkoxy, amino, di-(C₁-C₃ alkyl)amino, C₁-C₃alkylamide, aryl or heteroaryl, the aryl or heteroaryl being optionally substituted with R¹⁰; wherein R¹⁰ is C₁-C₆alkyl, C₃-C₇cycloalkyl, C₁-C₆alkoxy, amino, mono- or di-C₁-C₃alkylamino, amido, halo, trifluoromethyl, or heteroaryl.

28. (Original) A compound according to Claim 27, wherein, R¹⁰ is C₁-C₆alkyl, C₁-C₆alkoxy, amino optionally mono- or di substituted with C₁-C₃ alkyl, amido, C₁-C₃-alkylamide, halo, or heteroaryl.

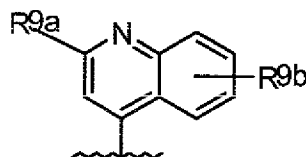
29. (Original) A compound according to Claim 28 wherein R¹⁰ is methyl, ethyl, isopropyl, tert-butyl, methoxy, chloro, amino optionally mono- or di substituted with C₁-C₃

alkyl, amido, or C₁-C₃alkyl thiazolyl.

30 (Currently Amended) A compound according to Claim [[29]] 25, wherein R⁸ is 1-naphthylmethyl, 2-naphthylmethyl, benzyl, 1-naphthyl, 2-naphthyl, or quinolinyl any of which is unsubstituted, mono, or disubstituted with R⁹ ~~as defined~~.

31 (Currently Amended) A compound according to Claim 30 wherein R⁸ is 1-naphthylmethyl, or quinolinyl any of which is unsubstituted, mono, or disubstituted with R⁹ ~~as defined~~.

32 (Original) A compound according to Claim 31 wherein R⁸ is:



wherein R^{9a} is C₁-C₆ alkyl; C₁-C₆alkoxy; thioC₁-C₃alkyl; amino optionally substituted with C₁-C₆alkyl; C₀-C₃alkylaryl; or C₀-C₃alkylheteroaryl, C₀-C₃alkylheterocyclyl, said aryl, heteroaryl or heterocycle being optionally substituted with R¹⁰ wherein

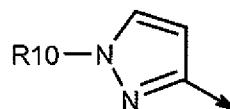
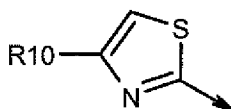
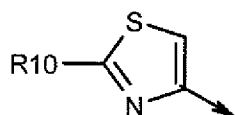
R¹⁰ is C₁-C₆alkyl, C₀-C₃alkylC₃-C₇cycloalkyl, C₁-C₆alkoxy, amino optionally mono- or di-substituted with C₁-C₆alkyl, amido, C₁-C₃alkyl amide; and

R^{9b} is C₁-C₆ alkyl, C₁-C₆-alkoxy, amino, di(C₁-C₃alkyl)amino, (C₁-C₃alkyl) amide, NO₂, OH, halo, trifluoromethyl, carboxyl.

33 (Currently Amened) A compound according to Claim 32, wherein R^{9a} is aryl or

heteroaryl, either of which is optionally substituted with R¹⁰ as defined.

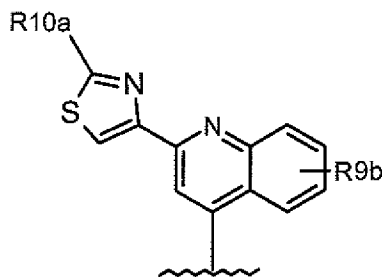
34 (Original) A compound according to Claim 33, wherein R^{9a} is selected from the group consisted of:



wherein R¹⁰ is H, C₁-C₆alkyl, or C₀-C₃alkylcycloalkyl, amino optionally mono- or di-substituted with C₁-C₆alkyl, amido, (C₁-C₃alkyl)amide.

35. (Currently Amended) A compound according to Claim 33, wherein R^{9a} is ~~optionally substituted optionally substituted with R₁₀-phenyl, preferably phenyl~~ optionally substituted with C₁-C₆alkyl; C₁-C₆alkoxy; or halo.

36. (Original) A compound according to Claim 32, wherein R⁸ is:



wherein R^{10a} is H, C₁-C₆alkyl, or C₀-C₃alkylcarbocyclyl, amino optionally mono- or di-substituted with C₁-C₆alkyl, amido, heteroaryl or heterocyclyl; and R^{9b} is C₁-C₆ alkyl, C₁-C₆-alkoxy, amino, di(C₁-C₃ alkyl)amino, amido, NO₂, OH, halo, trifluoromethyl, or carboxyl.

37. (Currently Amended) A compound according to ~~any~~ Claim 32, wherein R^{9b} is C₁-C₆-alkoxy, ~~preferably methoxy~~.

38. (Original) A compound according to Claim 1, wherein A is C(=O)NHSO₂R².

39. (Currently Amended) A compound according to Claim 38, wherein R² is optionally substituted C₁-C₆ alkyl, ~~preferably methyl~~.

40. (Currently Amended) A compound according to Claim 38, wherein R² is optionally substituted C₃-C₇cycloalkyl, ~~preferably cyclopropyl~~.

41. (Currently Amended) A compound according to Claim 38, wherein R² is optionally substituted C₀-C₆alkylaryl, ~~preferably optionally substituted phenyl~~.

42. (Original) A compound according to Claim 1, wherein A is C(=O)OR¹.

43. (Currently Amended) A compound according to Claim 42, wherein R¹ is H or C₁-C₆ alkyl, ~~preferably hydrogen, methyl, ethyl, or tert-butyl~~.

44. (Currently Amended) A compound according to Claim 2, wherein R^{7'} is H and R⁷ is n-ethyl, cyclopropylmethyl, cyclopropyl, cyclobutylmethyl cyclobutyl or mercaptomethyl, ~~preferably n-propyl or 2,2-difluoroethyl~~.

45. (Original) A compound according to Claim 2, wherein R^7 and $R^{7'}$ together define a spiro-cyclopropyl or spiro-cyclobutyl ring, both optionally mono or di-substituted with $R^{7,a}$ wherein;

$R^{7,a}$ is C_1 - C_6 alkyl, C_3 - C_5 cycloalkyl, or C_2 - C_6 alkenyl, any of which is optionally substituted with halo; or $R^{7,a}$ is J.

46. (Original) A compound according to Claim 45 wherein the ring is a spiro-cyclopropyl ring substituted with $R^{7,a}$ wherein;

$R^{7,a}$ is ethyl, vinyl, cyclopropyl, 1- or 2-bromoethyl, 1-or 2-fluoroethyl, 2-bromovinyl or 2-fluorethyl.

47. (Original) A compound according to Claim 2, wherein R^7 is J and $R^{7'}$ is H.

48. (Currently Amended) A compound according to Claim 1, wherein J is a 3 to 8-membered saturated or unsaturated alkylene chain optionally containing one to two heteroatoms independently selected from: -O-, -S- or -NR¹²-, wherein R^{12} is H, C_1 - C_6 alkyl, ~~such as methyl,~~ or -C(=O) C_1 - C_6 alkyl, ~~such as acetyl.~~

49. (Original) A compound according to Claim 48, wherein J is a 4 to 7-membered saturated or unsaturated, all carbon alkylene chain.

50. (Original) A compound according to Claim 48, wherein J is saturated or mono-

unsaturated.

51. (Original) A compound according to Claim 48, wherein J is dimensioned to provide a macrocycle of 14 or 15 ring atoms.

52. (Original) A pharmaceutical composition comprising a compound as defined in claim 1, and a pharmaceutically acceptable carrier therefor.

53. (Original) A pharmaceutical composition according to Claim 52, further comprising an additional HCV antiviral, selected from nucleoside analogue polymerase inhibitors, protease inhibitors, ribavirin and interferon.

54-55. (Cancelled)

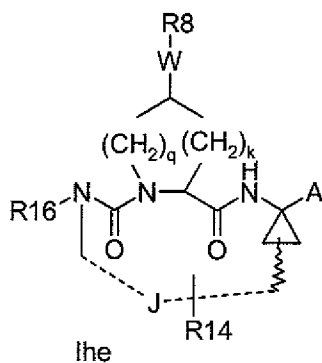
56. (Currently Amended) A method for treatment or prophylaxis of flavivirus infection such as HCV comprising ~~the administration~~ administering of an effective amount of a compound as defined in claim 1 to an individual afflicted or at risk of such infection.

57. (New) The compound according to Claim 19 wherein heterocycle is morpholine, piperidine or piperazine.

58. (New) The compound according to Claim 40 wherein R² is optionally substituted cyclopropyl whereint the substituent is C₁-C₃ alkyl.

59. (New) The method according to Claim 56 wherein the flavivirus infection is HCV infection.

60. (New) A compound according to Claim 1 with the formula Ihe



or pharmaceutically acceptable salt thereof

wherein

R¹⁶ is H, or C₁-C₆alkyl;

J is a single 3 to 10-membered saturated or partially unsaturated alkylene chain;

q is 1 and k is 1;

A is C(=O)OR¹, or C(=O)NHSO₂R², wherein

R¹ is hydrogen or C₁-C₆alkyl;

R² is C₁-C₆alkyl, C₀-C₃alkylcarbocyclyl, C₀-C₃alkylheterocyclyl;

W is -O- or -OC(=O)NH-;

R⁸ is C₀-C₃alkylaryl or C₀-C₃alkylheteroaryl, either of which is optionally mono, di, or tri substituted with R⁹, wherein;

R⁹ is C₁-C₆alkyl, C₁-C₆alkoxy, NO₂, OH, halo, trifluoromethyl, amino or amido

optionally mono- or di-substituted with C₁-C₆alkyl, C₀-C₃alkylaryl, C₀-C₃alkylheteroaryl, carboxyl, aryl or heteroaryl being optionally substituted with R¹⁰; wherein

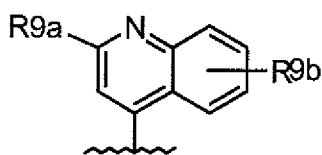
R¹⁰ is C₁-C₆alkyl, C₃-C₇cycloalkyl, C₁-C₆alkoxy, amino optionally mono- or di-substituted with C₁-C₆alkyl, C₁-C₃ alkyl amide, sulfonylC₁-C₃alkyl, NO₂, OH, halo, trifluoromethyl, carboxyl or heteroaryl.

61. (New) A compound according to Claim 60, wherein J is a single 5-8 membered saturated or partially unsaturated alkylene chain..

62. (New) A compound according to Claims 60, wherein J is monounsaturated.

63. (New) A compound according to Claim 62, wherein J has one double bond spaced one carbon atom from the cyclopropyl group depicted in formula Ihe.

64. (New) A compound according to Claim 60, wherein R⁸ is the group

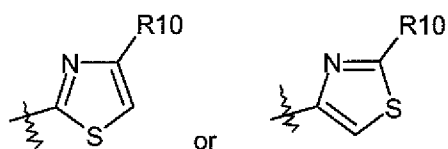


wherein R^{9a} is C₀-C₃alkylaryl, C₀-C₃alkylheteroaryl, or C₀-C₃alkylheterocyclyl; said aryl, heteroaryl or heterocyclyl being optionally substituted with R¹⁰ wherein R¹⁰ is C₁-C₆alkyl, amino, amino mono- or disubstituted with C₁-C₆alkyl or NHC(=O)C₁-C₆alkyl; and

R^{9b} is C₁-C₆-alkoxy; or

R⁸ is C₀-C₃alkylaryl wherein the aryl group is optionally substituted with 1-2 substituents selected from C₀-C₃alkylheterocyclyl and trifluoC₁-C₆alkyl; and wherein the C₀-C₃alkylheterocyclyl is optionally substituted with R¹⁰.

65. (New) A compound according to Claim 64, wherein R^{9a} is phenyl,



wherein R¹⁰ is H, C₁-C₆alkyl, amino, amino mono or disubstituted with C₁-C₃alkyl.

66. (New) A compound according to any of Claims 60, wherein A is C(=O)NHS(=O)₂R².

67. (New) A compound according to Claim 66, wherein R² is optionally substituted cycloalkyl.

68. (New) The compound according to Claim 67 wherein R² is optionally substituted cyclopropyl.